

**PASCOAG UTILITY DISTRICT  
ELECTRIC DEPARTMENT**

**IN RE: PASCOAG UTILITY DISTRICT'S  
DEMAND SIDE MANAGEMENT PROGRAM – 2003**

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October 2, 2002

Rhode Island Public Utilities Commission  
Ms. Luly Massaro  
Clerk of the Commission  
89 Jefferson Blvd.  
Warwick, RI 02888

***Re: RIPUC Docket 3474  
Demand Side Management Program***

Dear Ms. Massaro:

On behalf of the Pascoag Utility District ("Pascoag" or "District"), enclosed are an original and nine copies of Pascoag's proposed Demand Side Management Program for 2003. This submission includes Pascoag's Executive Summary detailing the District's proposed DSM program, 2002 DSM activity and budget, the proposed 2003 budget, and other schedules that support this docket.

Under separate cover, but included as part of RIPUC Docket No. 3474, is back-up documentation containing supporting invoices and energy savings.

If you have any questions, or require additional information, please do not hesitate to contact me.

Very truly yours,

Judith R. Allaire  
Customer Service and Accounting Manager

Cc: Mr. William Lueker, Esquire  
Mr. William Bernstein, Esquire

**Pascoag's 2003 Demand Side Management Program**  
**Executive Summary: Submitted by Theodore G. Garille**

Pascoag's 2003 Demand Side Management Program for 2003 will carry over several successful programs introduced last year. Several of these programs, such as electric heat conversion and low-income weatherization assistance, although still in the early stages, show potential for future growth and enhancement.

Pascoag is proposing some new residential programs, while some older programs will be phased out. This year our focus will also be on customer education and customer outreach. The District needs to make all customers – residential, commercial, and industrial - aware of what programs will benefit them. We've added some programs based on customer request - such as the Energy Efficient Heating Systems/Burner Replacement Incentive. Customer demand, for a program such as this, would seem to assure its success.

Pascoag's 2003 DSM programs encourage conservation, stress education, and strive to develop a working partnership with our residential customers. The best conservation programs in the world cannot be effective if the customers are not aware of them. By stressing customer involvement, the District hopes to get more customer participation, which, in the past has been rather disappointing. The programs offered to the commercial and industrial customers are structured to offer attractive incentives for energy efficiency improvements or new construction. A large part of the Commercial and Industrial program is dedicated to the District's largest existing customer. As that facility grows in 2003, funds will be dedicated to making the new plant energy efficient.

Late in 2002, Pascoag began an intensive training program for its Customer Service Representatives. This training is an on-going process, and will continue into 2003. The training involved both in-house sessions detailing Pascoag's Residential Conservation Service, as well as training seminars sponsored by Northeast Public Power Association and Energy New England. These seminars outlined the workings of an energy audit – from the first telephone call from the customer initiating the audit, through the finished audit report, as well as highlighting other conservation programs. Additionally, two of the District's Customer Service Representatives went with Energy New England technicians on residential energy audits to get a "hands-on" view. It is now standard procedure for the Customer Service Representatives to offer the ENE hot line to customers in need of technical assistance or who require additional resources. Suggestions of weatherization audits to customers who are having financial difficulties, explaining the EnergyStar appliance rebate, and offering new customers energy saving booklets and nightlights are also done.

The funding for the 2003 programs in this filing is based on 2.0 mils per kilowatt-hour assessment established by legislation. A residential customer using 500 kilowatt-hours will pay approximately \$1.00 on their monthly bill for the conservation programs proposed in this budget. The customer has seen the DSM assessment since its inception.

There is a separate line item on the monthly electric bills identifying the conservation cost.

Pascoag's proposed 2003 budget is based on estimated annual kilowatt-hour sales of 47,379,000, as well as a carry over of funds from its 2002 DSM budget. The kilowatt-hour sales projections are based on actual kilowatt-hour sales from January 2002 through August 2002 and estimated kilowatt-hour sales from September 2002 through December 2002, plus a growth projection of 3%. Pascoag used a 3% growth factor based on the expansion of Danielle Prosciutto beginning in spring of 2003. This project should be complete in late 2003. The revenue based on estimated sales for 2003 is \$94,750. The estimated carry over balance from the 2002 DSM budget is \$70,000. The total 2003 budget is \$165,000. The carry over balance is subject to "true-up" at year-end. The District will submit a report yearly in 2003 reconciling the actual expenditures.

Funds collected through the \$0.0020 assessment are used exclusively for conservation programs, and any funds not used in one year are typically carried over to the next year. All classes of customers all benefit from DSM funds.

Pascoag requests continued approval of the zero interest financing on commercial and industrial projects, as well as residential electric heat conversion. The amount reserved for commercial and industrial programs is \$30,000, with no more than three (3) loans outstanding at any one time. The term on the commercial and industrial loans is due within the budget year.

The amount reserved for residential electric heat conversion is \$20,000, with no more than five (5) residential loans outstanding at any one time. A cap on the electric heat no-interest loan is set at \$4,000 per participant. The residential loan terms are structured for eighteen months. The total amount outstanding at any one time under the auspices of the no-interest loan program will never exceed \$50,000.

The no-interest loan program has been offered to commercial and industrial customers for the past several years. This has often been the prime determining factor in projects going forward. Customers participating in the no-interest loan program have included small business, such as a local service station, to large industrial customer – Zambarano Memorial Hospital. This program has had a 100% re-payment rate.

The no-interest loan program for residential customers is in its second year. In late September 2002, Pascoag's first customer, for electric heat conversion, began their project. As of this date, the customer indicated that they plan to take advantage of the no-interest loan program. In our January report, the District will update the status of the project.

**Residential, Commercial, Industrial, Customer Education and Administrative  
Expense 2003**

**Residential Programs:**

This year the District plans to continue many programs from its 2002 DSM program and introduce three new programs. Based on lack of customer participation, some of the less successful programs will be discontinued in 2003.

This summary includes highlights from last year's programs, a review of new programs, and the results of various studies completed under last year's program.

**The Residential Conservation Service (Energy New England)**

- The continuation of a toll free energy hot line available to Pascoag's customer, five days a week, eight hours a day. The energy hot line is staffed by certified energy experts.
- Fulfillment services to customers for energy referrals, energy audit scheduling, conservation materials (booklets, web sites, EnergySmart cd's.)
- Assistance to Pascoag staff on rebates/incentives on EnergyStar appliances
- Community/school outreach programs
- Pascoag will continue to participate in the Energy New England Advisory Group
- Referrals for customers who require financial assistance (TriTown, local agencies)
- Outreach programs to various community groups

In 2002, approximately 12 to 15 customers took advantage of the toll free energy hot line. Follow up on these calls included distribution of conservation material, "mini" appliance audits (done without a home visit, and at no cost), referrals for energy efficient appliances, and scheduling home energy audits.

Lack of customer participation has been somewhat disappointing. Pascoag advertised this toll free number through a separate mailing, with bill messages, through newsletters, and at community events with handouts and posters. This year, we plan another comprehensive program of advertising – beginning early in 2003 - including ads in our local mailers (Northwest Neighbors and the Bargain Buyer) – and continuing throughout the year. The Administrative Expense will reflect this advertising cost.

During the summer, Pascoag had several meetings with ENE staff and the Rhode Island Energy Office to implement the Weatherization Program. These meetings resulted in a great deal of information on assistance available to low-income customers, which ENE will pass on to customers who use the toll free number – just one more way to help customers who require assistance with their energy bills.

Currently, we are planning a speaker program for a local senior citizen group early in November. The presentation will include information on the Weatherization Program, home energy audits, and other conservation programs offered by Pascoag.

In 2003, the District plans to continue this outreach to other community and business groups.

Pascoag participated in two Advisory Group meetings – one in June, and one in September. Both meetings were very productive, and Pascoag came away with many ideas. Topics included incentives, rebates, heating system upgrades, and other issues. In 2003, Pascoag will continue to attend these quarterly meetings. They prove to be a good forum for an exchange of ideas with other public power utilities.

Energy New England has held the cost for the Residential Conservation Program to the 2002 level of \$350 per month. Based on that rate, Pascoag's request for this program is \$4,200.

### **Incentive for Electric Heat**

For 2003, the District is currently exploring, with the owner of the twelve family apartment complex, a possible electric heat conversion of that facility. This project, still in the discussion phases, would be a major one for the District.

If this project comes to fruition, the District plans to dedicate its entire 2003 electric heat conversion funds to its completion. This one project has the conservation benefits of several individual heating conversions. However, based on what the District learned in 2002, electric heat conversion is not inexpensive.

In Pascoag's 2002 budget, we estimated a cost of \$5,000 per conversion. In reality, that cost is much closer to \$10,000 for a single family home. The cost of conversion of a multi-family home is sure to be much higher, and Pascoag's incentive for conversion of a multi-family dwelling is based to reflect that cost.

Many of the families in this apartment complex are low income and qualify for additional weatherization benefits, either with Pascoag or with TriTown. This additional weatherization will result in even greater energy savings to both the customer and the District.

In the event that the multi family project does not go forward, Pascoag's electric heat conversion program will mirror last year's.

Pascoag will offer a twenty percent rebate (not to exceed \$1,000 per conversion), along with eighteen months no interest loan for up to \$4,000.

All criteria will remain the same for conversions.

- customer completes an information survey
- ENE does a preliminary audit to make sure that the customer qualifies for the program, customer given a list of licensed contractors
- estimates will be obtained by the customer,
- ENE approves the proposed heating system
- Customer applies for no interest loan (if applicable)
- System installed
- ENE does follow up audit/verification of equipment
- Customer presents receipts to Pascoag
- Reimbursement to customer; no interest loan issued (if required)

In 2002, the District has two customers participating in the Electric Heat Conversion Program. Both customers have had a complete ENE audit and have selected contractors. ENE has approved one system; the second will be submitted for approval shortly. Both projects are expected to begin in the early fall of 2002. In late September, the District had another customer inquire about the Electric Heat Conversion Program. This customer is completing the initial questionnaire now, and should submit it shortly.

The energy audits and projected savings are included in this filing in Schedule H. These two projects were a great learning experience for Pascoag. The first thing we learned is that the cost of conversion is very high – approximately \$10,000 per system based on the first two projects. Based on that high cost and the economic conditions in the area, we are very pleased that we have two customers committed to the conversion, and one in the initial stages.

## **New Program**

### **Refrigeration Buy-Back**

This new program is the result of last year's "Study for Conservation Rate". In last year's budget, Pascoag requested \$3,000 to conduct a study to determine the feasibility of establishing a Conservation Rate or Conservation Credit. The study, conducted by Hudson River Energy Group, led in a much different direction than anticipated.

The report, included in this submittal as Schedule K, indicated that many cost saving conservation measures are already encouraged by Pascoag. These include hot water wraps, energy efficient light bulbs, EnergyStar appliances, as well as customer education. It indicated that the largest energy savings would result in two areas not yet explored by the District: in removal of "second" refrigerators and in the implementation of an air conditioner maintenance program.

Pascoag opted to select the refrigerator buy back program for a number of reasons. First, many families in the area live on lakes or ponds and these people often tend to have a second refrigerator used mostly in the summer months for outdoor entertaining, but plugged in all year long. These second refrigerators are often older models, which are relegated to the basement or garage, after the purchase of a new model for primary use. They tend to be left empty most of the year, but still consume electricity each month.

Secondly, and most importantly, the study findings indicated that the biggest energy savings would result from this type of program.

Customers wishing to participate in the program will first contact the District office. A twelve-month billing history will be generated to indicate their usage. District staff will visit the property to ensure that the second refrigerator is actually in use. A line meter will be installed on the second refrigerator for a period of several days to monitor its consumption prior to its removal. This will give the District a good idea of the energy savings that will result.

For qualifying customers, Pascoag will remove the refrigerator, dispose of the refrigerator using facilities available to the Town of Burrillville, and issue a \$50 credit to the customer's electric bill.

As an alternative to the \$50 credit applied directly to the electric bill, the District is looking at issuing a certificate called "Energy Saver Bucks". That certificate would be mailed to the customer, and could be applied to the electric bill for a month of their choice.

A follow up survey will be done to see if the anticipated energy savings are realized. The line item of \$2,000 will allow up to 30 customers to benefit from this buy-back program, and allow \$500 for staff time and expenses associated with tracking the energy savings, as well as any expenses related to disposal.

The air conditioner maintenance program may be offered in next year's budget. Pascoag will work with its consultants over the next year to determine the practicality of implementing such a program.

### **Community Projects**

This continues to be both a beneficial and enjoyable program. The District's involvement in community events encourages interaction between staff and customers. By itself, this interaction results in an exchange of ideas. From this type of exchange last year, we learned that many of our customers would be interested in a burner/heating system replacement program.



Events such as Career Day (with the Burrillville High School), Public Power Week activities (with elementary school children), the annual Family Fair, Burrillville Arts Festival, and other community events give the District an opportunity to get its conservation message to a wide range of people.

### **Home Energy Audits**

The District continues to offer free home energy audits to residential customers. Last year, only 4 customers took advantage of this program. This is another program that the District will promote heavily through various means this year. The budgeted amount of \$3,000 is reduced from last year, but still allows for up to 20 residential audits.

Last year, ENE offered a free “energy conservation device” (the customer chooses among items such as lights bulbs, a sample window insulation kit, etc.). This free give away will be highlighted this year in Pascoag’s ads. By stressing “free gift”, perhaps more families will participate.

### ***New Program***

#### **Energy Efficient Heating System/Burner Replacement**

This new program is designed to assist people who are replacing old heating systems with energy efficient equipment. The District is proposing a rebate of 10%, not to exceed \$250, to qualifying customers. The budgeted line item of \$2,500 is based on 10 customers participating. This program will apply to any heating fuel – oil, gas, or propane - providing that the replacement system meets energy efficiency standards.

ENE will visit the home, inspect the burner, rate the efficiency, and calculate the energy savings. All new systems must meet energy efficiency guidelines, and must be approved by the District.

Upon completion of the project, and an approval of the work, the rebate will be applied directly to the customer’s electric account or an Energy Saver Bucks certificate will be issued to the customer for payment on their electric bill for a month(s) of their choice.

This program is being offered based on two criteria. First, many of our customers indicated an interest in burner/heating system replacement. Last year we had many phone calls from customers asking if the District had a program in place. Second, the implementation of this program by the District was recommended by the Rhode Island Energy Office, since they had also received many inquiries about incentives for energy efficient heating systems in Pascoag’s service territory.

### **Customer Newsletters**

In 2002, Pascoag sent out two newsletters – a Spring/Summer edition and a Fall/Winter edition. Both editions meet with positive customer response, and we plan to continue this into 2003. Because of the positive response, Pascoag is considering the possibility of adding a “Special” issue mid summer 2003.

Last year, the District funded the newsletter with funds from Rebuild America. This year, the newsletters will be part of the District’s DSM program, as the Rebuild America funds have been exhausted.

The District proposes a line item of \$8,000 for newsletters.

### **Energy Homes/EnergyStar Appliances**

In 2002, the District had its first EnergyStar home completed. Several customers participated in the EnergyStar appliance program. Year-to-date, 6 customers have purchased new energy efficient appliances and received rebates totaling \$300. The proposed line item for this program is \$3,000. This would fund two EnergyStar home incentives at approximately \$1,000 each, and up to 20 appliances rebated at \$50 per appliance.

### **Low Income Weatherization Program**

Pascoag plans to continue to offer a “house doctor” approach to energy conservation measures for low income/fixed income customers.

Working over late summer and early fall 2002 with Energy New England, The State Energy Office, and Tri Town, Pascoag created a program, “WARM” (**W**eatherization **A**nd **R**elated **M**easures) that it is actively offering to its customers.

In August, the District mailed Financial Hardship applications to its customers. This database will be the first step in identifying eligible customers for the program.

The weatherization program, offered to customers through bill messages, the fall newsletter, and direct advertising, is geared to start serving customers this heating season.

Energy New England and Pascoag Electric will be addressing the local senior citizen association at their meeting November 4, 2002 to explain the weatherization program, as well as other conservation programs, to them.

Pascoag is requesting the funding for this program stay at \$10,000. ENE estimates the non-invasive conservation measures to be \$135 per dwelling. At this cost, we could assist approximately 75 families.

### **Monitoring/Tracking Savings Weatherization Program/Electric Heat Conversion**

Pascoag requests that this line item be reduced to \$4,000 for 2003. The bulk of the “creation” work is done. However, there is still a cost to follow up on the programs to track the energy savings.

Since Pascoag does not have the staff - or the technical ability - to follow up on many of the details, we rely on Energy New England to assist us with this.

A great deal of time was spent during the summer in meetings with several agencies. This time will be greatly reduced in 2003. However, we do plan to stay in contact with all agencies that helped us in the creation phase to be sure that the programs are offered to the widest possible audience.

### **Audits – Weatherization Program**

Again, there is not a lot to report for 2002, as the program got underway late summer and early fall 2002.

Pascoag requests \$5,000 for this item in 2003. That allows up to 75 families to take advantage of the program. The cost of the weatherization audit, estimated at \$75, is based on the reduced scope of this audit. Another cost benefit is that the recommendations of the audit are done at the same time as the audit, thereby reducing administrative expenses.

## ***New Program***

### **Catalog Incentive**

This year, ENE created a program that offers energy efficient devices to District customers through a conservation company called Niagara. There are ten or twelve different energy saving kits that customers can order – either from a catalog or by going on line to [www.energynewengland.com](http://www.energynewengland.com), and clicking on the conservation icon. That takes them to the next screen where all the participating utilities are listed. They would click on Pascoag Utility District, and that would then take them to the order screen.

The customer will pay 80% of the cost, with the District paying 20%. The District is setting aside \$2,000 for this pilot program.

ENE is currently producing the catalog that will be distributed to the District customers. The web site is under construction right now, but we were treated to a demonstration at the September Energy Advisory meeting. Both the web site and the catalog will be promoted later this year when all components are completed.

This program came out of recommendations from the Energy Advisory Group.

### **Industrial/Commercial Program:**

#### **Lighting/T8**

Pascoag is requesting \$50,000 for this item in 2003. A large portion of this is dedicated to new construction at the Danielle Prosciutto plant.

Several meetings were held in 2002 with DPI staff and the electrical engineers planning the expansion. These meetings gave Pascoag an opportunity to stress the importance of installing energy efficient lighting at the construction stages.

The construction on the new facility is scheduled to begin in the spring of 2003.

#### **Pending Projects**

Ground was broken for the new coffee shop late summer 2002. Pascoag requests any funds associated with this project not used in 2002, carried over for the completion of this project.

The new golf course is progressing very nicely. Again, some funds dedicated to this project were not expended in 2002. The District requests permission to carry these funds into 2003 to complete the project.

Last year, Pascoag proposed a generator study. At that time, the District thought that it might partner with Danielle Prosciutto on a generator that could be used both as a back-up source of power for their plant, and also would allow DPI to go off-line during periods of peak demand, similar to the partnership the District has with Zambarano.

However, the cost of that generator due to the size of the facility, proved to be more than Pascoag could reasonably accommodate. DPI's estimated load for the first phase of their expansion is 2 MWs. This will increase Pascoag's system demand by 20%.

RISE conducted an audit at the existing DPI plant in late September. That study indicated that installing new T8 lighting would result in substantial energy savings. Since

several “pending” projects were not going forward, this project was started in late fall 2002.

A new business in Harrisville, the Village Café, had RISE do an audit in 2002. The owner intends to implement the conservation retrofit ideas (mostly lighting), but he will be working with a private contractor. Pascoag will monitor all improvements, and RISE will validate that all qualify for rebates/incentives.

In early October, RISE is scheduling an audit of Bayberry Commons, a local nursing home. That project, a lighting retrofit, will be started in 2002, but may not be complete until 2003.

Pascoag contacted other local business owner – Village IGA and Lockheed Aluminum, but they indicated that they are not interested in any projects at this time. A great deal of their reluctance may be due to the current economic conditions, as well as the uncertainty and high cost of purchasing water. Many of the District’s larger commercial and industrial customers have seen their water bills more than double since the District has been purchasing 100% of its water from Harrisville.

#### **Administrative/Advertising/Education/Seminars:**

Pascoag combined these items to reflect some costs, quite frankly, we had not considered before.

Customers must be aware of programs in order for any to succeed. By dedicating a small amount of money to customer outreach, the District believes it is giving each program the highest probability of success.

Last year, we put notices on monthly electric bills, in newsletters, and at community events. However, we feel that a full push, using ads in local newspapers, and more frequent mailings, as well as direct marketing calls to our customers are necessary to encourage participation.

It is discouraging to have, what we consider to be, excellent programs in place, and no “takers”.

Hopefully, a more aggressive advertising will accomplish this. For “Advertising/Customer Notification”, Pascoag requests that \$2,000 be dedicated to customer outreach in the form of advertising, mailers and direct telephone marketing.

The portion of the District’s DSM budget dedicated to getting the programs out to customers is “Education/Seminars”. ENE will provide speakers for at least 2 seminars at the Burrillville High School on topics including conservation, energy efficient motors, energy efficient lighting, and hands on demonstrations. The one seminar completed last May was a great success, and we plan to build on that.

Also, this year ENE will assist Pascoag with a community outreach program. In November, Pascoag and ENE will sponsor a speaker program at the Senior Citizens Association monthly meeting. Our conservation programs, including the new Weatherization program will be explained. This is one type of program we would like to continue on a regular basis.

An outreach to commercial and industrial customer (our “key accounts”) is also in the planning stages. A quarterly breakfast meeting is one avenue being studied. This type of informal meeting seems to be a good way to get the conservation message out to business owners. Pascoag has 25 industrial and approximately 350 commercial accounts that could benefit from installing conservation measures.

By explaining what is available, and listening to customer requests, Pascoag hopes to get more participation. Pascoag is requesting \$4,000 to fund this educational program.

The “Administrative Expense” is based on last year’s actual cost. This expense covers time spend by District employees on projects directly related to conservation programs. Examples of Administrative Expense are: preparation of DSM budgets and programs; reconciliation of DSM budget; preparation of reports; attendance at hearings and meetings; and other miscellaneous items such as mileage reimbursement. For 2003, Pascoag is requesting \$7,000 for the Administrative Expense.